

### **III. Remarks**

The Remarks section is divided into three major subsections. The first major subsection addresses the Election/Restriction Requirement. The second major subsection addresses the obviousness rejection of claims 1 and 7-12 based on the combination of Masucci (US Patent No. 6,498,668) in view of Takai (US Patent No. 6,619,865). The third major subsection addresses the obviousness rejection of claims 1 and 7-12 based on the combination of Proctor (US Patent No. 5,872,645) in view of Takai (US Patent No. 6,619,865).

As detailed below, Applicant respectfully traverses the rejections and requests allowance of the claims. As detailed below, the Applicant's invention contains and claims novel features not disclosed in the cited references.

#### **A. ELECTION/RESTRICTON**

On November 1, 2005 the Examiner mailed an election/restriction requirement, requiring the Applicant to elect claims 1-12 or claims 13 and 15-20. On November 30, 2005 Applicant filed a Response to the election/restriction requirement, electing with traverse Group 1 (claims 1-12). On March 24, 2006 the Examiner acknowledged the election with traverse of Group 1. Applicant hereby elects Group 1 (claims 1-12).

**B. Masucci And Takai Together Do Not Render Claims 1 And 7-12 Of The Present Invention Obvious Because The References Do Not Disclose “a second plurality of optical network units connected to the optical line terminal and configured for optically transmitting TDMA signals of a second wavelength different than the first wavelength to the optical line terminal through the optical transmission line”.**

Applicant has carefully reviewed and analyzed the Examiner's Office communication and has also carefully reviewed the disclosures in the Masucci (US Patent No. 6,498,668) and Takai (US Patent No. 6,619,865) patents. After this review, Applicant respectfully disagrees with the Examiner's rejections based on the combination being anticipatory and obvious.

The Examiner has cited the combination of Masucci (US Patent No. 6,498,668) in view of Takai (US Patent No. 6,619,865). Claims 1 and 7-12 of the present application are all claims that each include the following limitation “a second plurality of optical network units connected to the optical line terminal and configured for optically transmitting TDMA signals of a second wavelength different than the first wavelength to the optical line terminal through the optical transmission line”.

Time division multiple access (TDMA) is a technology for shared medium networks. It allows several users to share the same medium by dividing it into different timeslots. The users transmit in succession, each using their own timeslot. This allows multiple users to share the same transmission medium while using only a portion of its total bandwidth.

Even if we assume that Masucci discloses the other elements of the claims, which Applicant disputes, Takai does not disclose “a second plurality of optical network units

connected to the optical line terminal and configured for optically transmitting TDMA signals of a second wavelength..." in the location cited by the Examiner. In fact, Takai does not refer to TDMA signals, or time-division-multiplexed-signals anywhere in the patent. The Takai patent has NOTHING to do with TDMA signals. Therefore, the Takai patent cannot and does not disclose "a second plurality of optical network units connected to the optical line terminal and **configured for optically transmitting TDMA signals** of a second wavelength different than the first wavelength to the optical line terminal through the optical transmission line".

The Takai patent describes a system for converting optical signals between two optical communication paths, which is not related to the invention described in the Application. The reference to a second wavelength " $\lambda_{ov}$  in Fig. 4" of Takai does not relate to a configuration for optically transmitting TDMA signals. In fact, Takai specifically states that "signals having frequencies  $\lambda_{of}$  and  $\lambda_{ov}$  transmitted from the terminal networks through the optical fibers are optical frequency division demultiplexed/multiplexed or divided/optical frequency division multiplexed by the terminal interface unit if necessary and are supplied to the optical frequency conversion unit." (See Takai Col. 5:31-36) As such, the signals in Takai are frequency division multiplexed, not time division multiplexed. Therefore, the combination does not disclose all of the elements in Applicant's claims, nor would it have been obvious to combine them.

In conclusion, Applicant respectfully submits that the Takai reference does not read on this application, and that the Masucci/Takai combination does not render obvious the present invention as claimed in claims 1 and 7-12.

**C. Proctor And Takai Together Do Not Render Claims 1 And 8-11 Of The Present Invention Obvious Because The References Do Not Disclose “a second plurality of optical network units connected to the optical line terminal and configured for optically transmitting TDMA signals of a second wavelength different than the first wavelength to the optical line terminal through the optical transmission line”.**

Applicant has carefully reviewed and analyzed the Examiner's Office communication and has also carefully reviewed the disclosures in the Proctor (US Patent No. 5,872,645) and Takai (US Patent No. 6,619,865) patents. After this review, Applicant respectfully disagrees with the Examiner's rejections based on the combination being anticipatory and obvious.

Similar to the discussion above, the Examiner has cited the combination of Proctor (US Patent No. 5,872,645) in view of Takai (US Patent No. 6,619,865). Claims 1 and 8-11 of the present application are all claims that each include the following limitation “a second plurality of optical network units connected to the optical line terminal and configured for optically transmitting TDMA signals of a second wavelength different than the first wavelength to the optical line terminal through the optical transmission line”.

Again, even if we assume that Proctor discloses the other elements of the claims, which Applicant disputes, Takai does not disclose “a second plurality of optical network units connected to the optical line terminal and configured for optically transmitting TDMA signals of a second wavelength...” in the location cited by the Examiner. Takai does not refer to TDMA signals, or time-division-multiplexed-signals anywhere in the patent. The Takai patent has NOTHING to do with TDMA signals. Therefore, the Takai patent cannot and does not disclose “a second plurality of optical network units connected to the optical line terminal and **configured**

**for optically transmitting TDMA signals** of a second wavelength different than the first wavelength to the optical line terminal through the optical transmission line”.

#### **IV. CONCLUSION**

As discussed in detail above, the cited art does not have significant elements of the present invention, including “a second plurality of optical network units connected to the optical line terminal and **configured for optically transmitting TDMA signals** of a second wavelength different than the first wavelength to the optical line terminal through the optical transmission line”. The Examiner has conceded that the Masucci and the Proctor references fail to disclose this element, and the Applicant has shown that the Takai reference cited by the Examiner also fails to disclose this element.

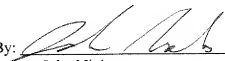
In light of the above remarks, the Applicant respectfully requests that the Examiner grant allowance to the pending claims. Applicant believes that the claims are proper, definite, and define novel subject matter that is also not obvious.

If for any reason, this application is not believed to be in full condition for allowance, Applicant respectfully requests the constructive assistance and suggestion of the Examiner pursuant to M.P.E.P. section 2173.02 and section 707.07(j) in order that the undersigned can place this application in fully allowable condition.

Respectfully submitted,

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